

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)

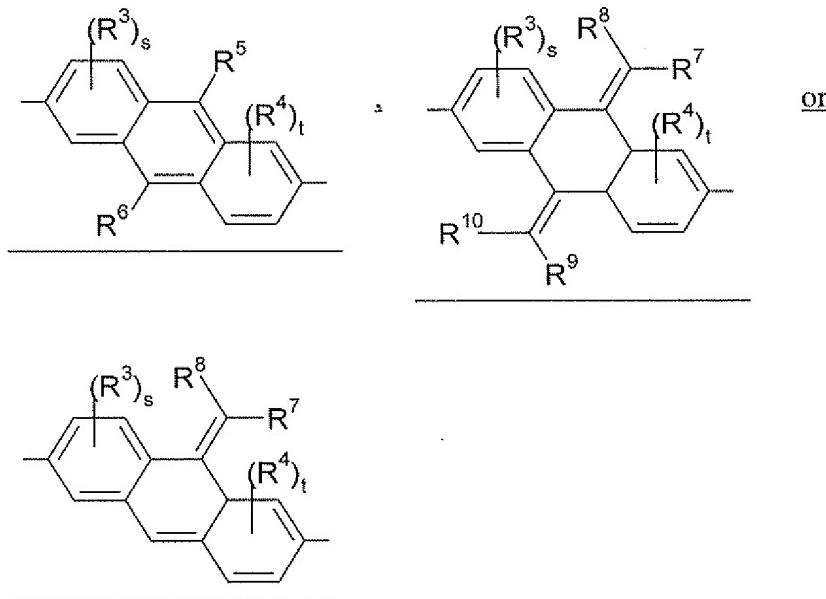
2. (Currently Amended) A compound comprising one or more identical
or different groups of Compounds according to claim 1, selected of formula I1

-[(G)_g-(A)_a]_z-

I1

wherein G and g have the meanings of formula I,

G is, in case of multiple occurrence independently of one another,



R³ to R¹⁰ are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one

another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R⁰ and R⁰⁰ are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerizable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

g is, in case of multiple occurrence independently of one another, 1, 2 or 3,

A is, in case of multiple occurrence independently of one another, -CX¹=CX²-, -C≡C-, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more hetero atoms selected from the group consisting of N, O and S, and are optionally mono- or polysubstituted by R³ as defined in formula I,

X¹ and X² are independently of each other H, F, Cl or CN,

a is, in case of multiple occurrence independently of one another, 0 or 1,

z is an integer of 2 to 5000 ≥4,

wherein in case of multiple occurrence the groups [(G)_g-(A)_a] can be identical or different.

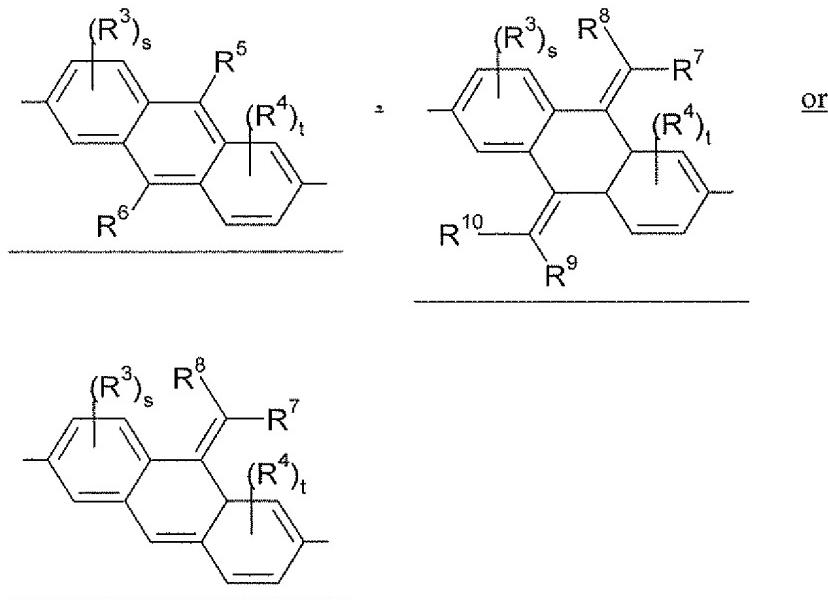
3. (Currently Amended) A compound of Compounds according to claim 1, selected of formula I1A

$R^1-[(G)_g-(A)_a]_z-R^2$

I1A

wherein G, g, A, a and z have the meanings of formula II,

G is, in case of multiple occurrence independently of one another,



R^3 to R^{10} are, independently of each other, F, Cl, Br, I, CN, NO_2 , NCS, SF_5 or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH_2 groups are optionally replaced, in each case independently from one another, by $-O-$, $-S-$, $-NH-$, $-NR^0-$, $-SiR^0R^{00}-$, $-CO-$, $-COO-$, $-OCO-$, $-OCO-O-$, $-S-CO-$, $-CO-S-$, $-CY^1=CY^2-$ or $-C\equiv C-$ in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp.

R^0 and R^{00} are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerizable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

g is, in case of multiple occurrence independently of one another, 1, 2 or 3,

A is, in case of multiple occurrence independently of one another, -CX¹=CX²-,-C≡C-, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more hetero atoms selected from the group consisting of N, O and S, and are optionally mono- or polysubstituted by R³,

X¹ and X² are independently of each other H, F, Cl or CN,

a is, in case of multiple occurrence independently of one another, 0 or 1,

z is an integer ≥ 1,

R¹ and R² have, independently of each other, one of the meanings of R³ in formula I, or denote B(OR')(OR''), SnR⁰R⁰⁰R⁰⁰⁰ or SiR⁰R⁰⁰R⁰⁰⁰,

R⁰⁻⁰⁰⁰ are, independently of each other, H, aryl or alkyl with 1 to 12 C-atoms,

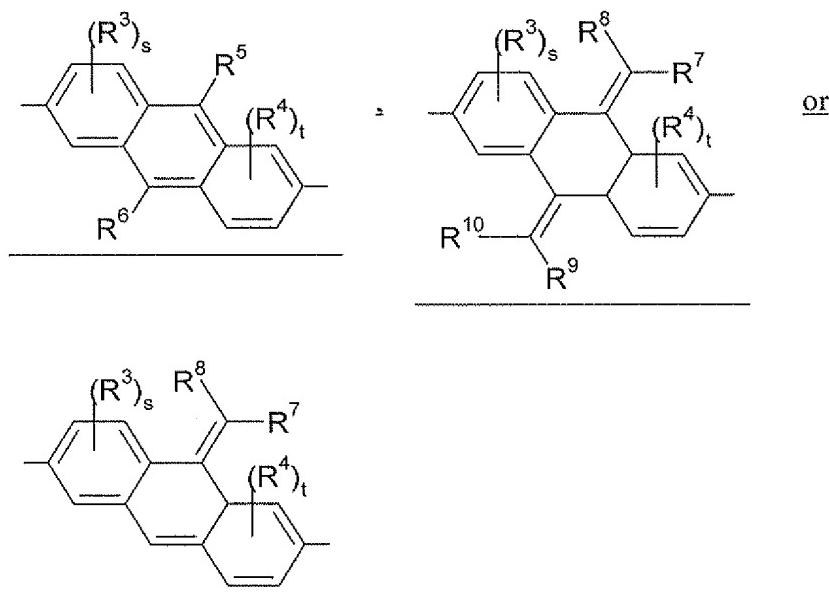
R' and R'' are, independently of each other, H or alkyl with 1 to 12 C-atoms, or OR' and OR'' together with the boron atom may also form a cyclic group having 2 to 10 C atoms.

4. (Currently Amended) A compound of Compounds according to claim 4, selected of formula I2

R¹¹-(A¹-Z¹)_m-(G¹)_u-Z³-(A³-Z⁴)_q-(G²)_v-(Z²-A²)_n-R¹² 12

wherein

G¹ and G² have are, independently of each other one of the meanings of G in formula I, and in case of multiple occurrence of either G¹ and/or G² each of such G¹ and G² independently of one another,



R³ to R¹² are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R⁰ and R⁰⁰ are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerizable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

g is, in case of multiple occurrence independently of one another, 1, 2 or 3,

A¹ to A³ are, independently of each other and in case of multiple occurrence of A¹ to A³ each of such A¹ to A³ independently of one another, -CX¹=CX²-, -C≡C-, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more hetero atoms selected from the group consisting of N, O and S, and are optionally mono- or polysubstituted by R³,

X¹ and X² are independently of each other H, F, Cl or CN,

a is, in case of multiple occurrence independently of one another, 0 or 1,

z is an integer ≥ 1,

R⁴⁴ and R⁴² have independently of each other one of the meanings of R³ in formula I,

A⁴ to A³ have independently of each other one of the meanings of A in formula II,

Z¹ to Z⁴ are, independently of each other, -O-, -S-, -CO-, -COO-, -OCO-, -S-CO-, -CO-S-, -O-COO-, -CO-NR⁰-, -NR⁰-CO-, -OCH₂-, -CH₂O-, -SCH₂-, -CH₂S-, -CF₂O-, -OCF₂-, -CF₂S-, -SCF₂-, -CH₂CH₂-, -CF₂CH₂-, -CH₂CF₂-, -CF₂CF₂-, -CH=N-, -N=CH-, -N=N-, -CH=CR⁰-, -CY¹=CY²-, -C≡C-, -CH=CH-COO-, -OCO-CH=CH- or a single bond,

Y¹ and Y² are independently of each other H, F, Cl or CN,

R⁰ and R⁰⁰ have the meanings given in formula I,

m, n and q are independently of each other 0, 1, 2 or 3,

u and v are independently of each other 0, 1 or 2, with u+v > 0.

5. (Currently Amended) A compound Compounds according to claim 3,
wherein characterized in that z is an integer of from 2 to 5000.

6. (Currently Amended) A compound Compounds according to claim 3,
wherein characterized in that z is an integer of from 1 to 15.

7. (Currently Amended) A compound Compounds according to claim 3,
wherein characterized in that one or both of R¹ and R² denote P-Sp-.

8. (Currently Amended) A compound Compounds according to claim 2,
wherein characterized in that R³ and R⁴ are, each independently, selected from F, Cl, CN, alkyl, oxaalkyl, alkoxy, alkylcarbonyl or alkoxy carbonyl with 1 to 15 C-atoms or alkenyl, alkenyloxy or alkynyl with 2 to 15 C-atoms.

9. (Currently Amended) A compound Compounds according to claim 2,
wherein characterized in that R⁵⁻¹⁰ are, each independently, selected from F, Cl, CN, C₁-C₂₀-alkyl that is optionally substituted with one or more fluorine atoms, C₂-C₂₀-alkenyl, C₂-C₂₀-alkynyl, C₄-C₂₀-alkenyl, C₄-C₂₀-alkynyl, C₁-C₂₀-alkoxy, C₁-C₂₀-thioalkyl, C₁-C₂₀-silyl, C₁-C₂₀-ester, C₁-C₂₀-amino, C₁-C₂₀-fluoroalkyl, or (CH₂CH₂O)_m with m being an integer of from 1 to 6.

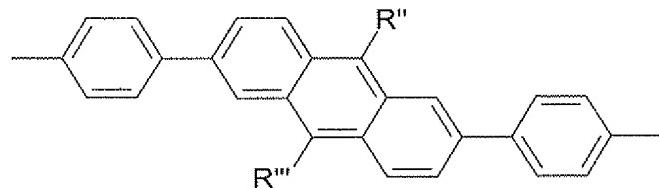
10. (Currently Amended) A compound Compounds according to Claim 2,
wherein characterized in that A, each independently, are and A⁺³ are selected from furane-2,5-diyl, thiophene-2,5-diyl, thienothiophene-2,5-diyl, dithienothiophene-2,6-diyl, pyrrol-2,5-diyl, 1,4-phenylene, azulene-2,6-diyl, pyridine-2,5-diyl, pyrimidine-2,5-diyl, naphthalene-2,6-diyl, 1,2,3,4-tetrahydro-naphthalene-2,6-diyl, indane-2,5-diyl, or 1,4-cyclohexylene, wherein one or two non-adjacent CH₂ groups are optionally replaced by O and/or S, wherein these groups are unsubstituted, mono- or polysubstituted by R³.

11. (Currently Amended) A compound Compounds according to claim 2,
wherein characterized in that P is a vinyl ether, propenyl ether or oxetane group.

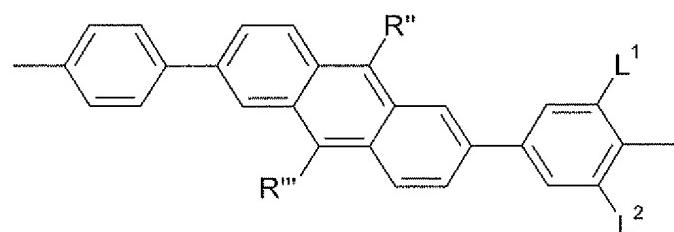
12. (Currently Amended)

~~Compounds according to Claim 1, characterized~~

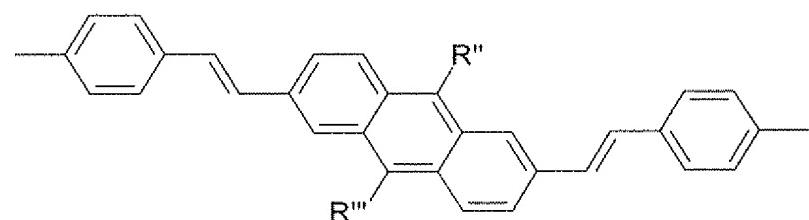
~~in that it they comprise one or more repeating units selected from the following formulae A compound according to claim 2, wherein the group of formula II is of formula Ia, Ib, Ic, Id, Ie, If, Ig, Ih, II, Ik, Im, In or Io~~



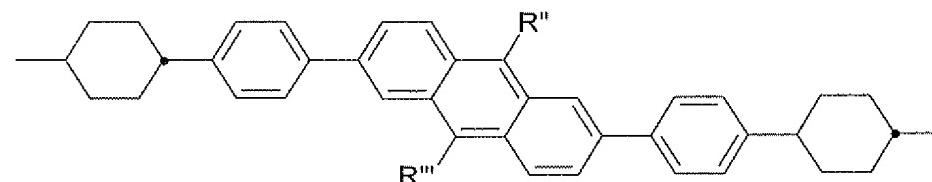
Ia



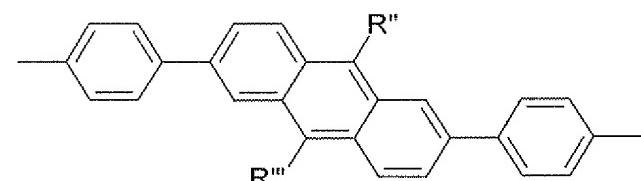
Ib



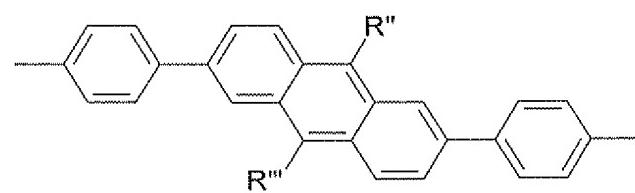
Ic



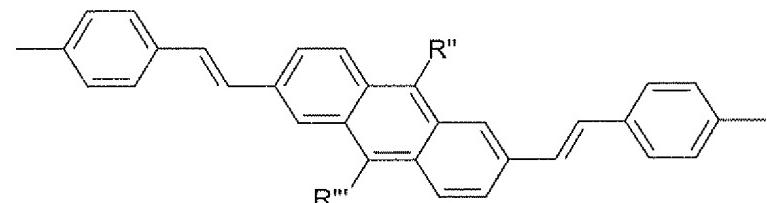
Id



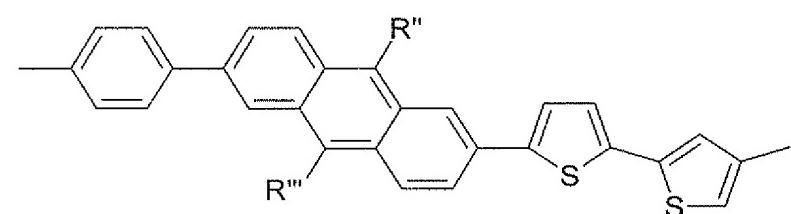
Ie



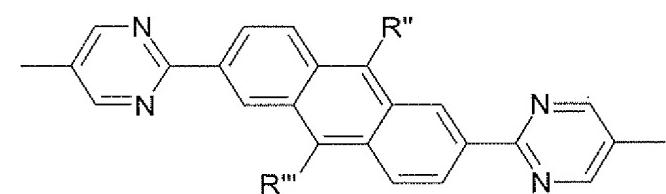
IIf



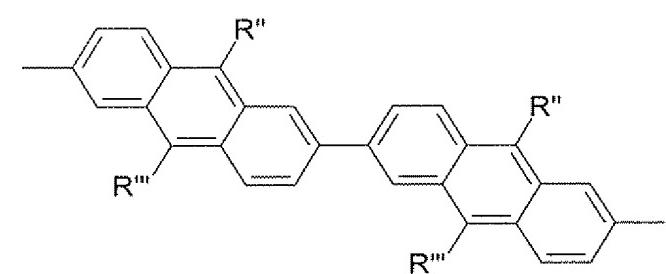
Ig



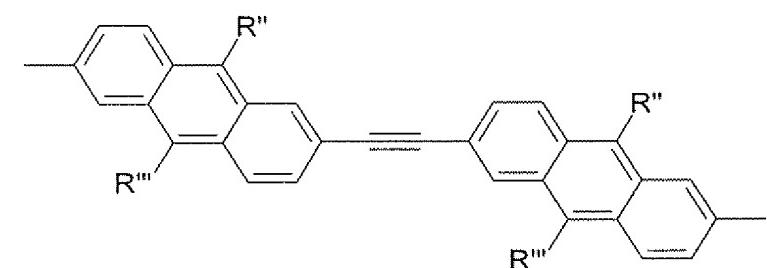
Ih



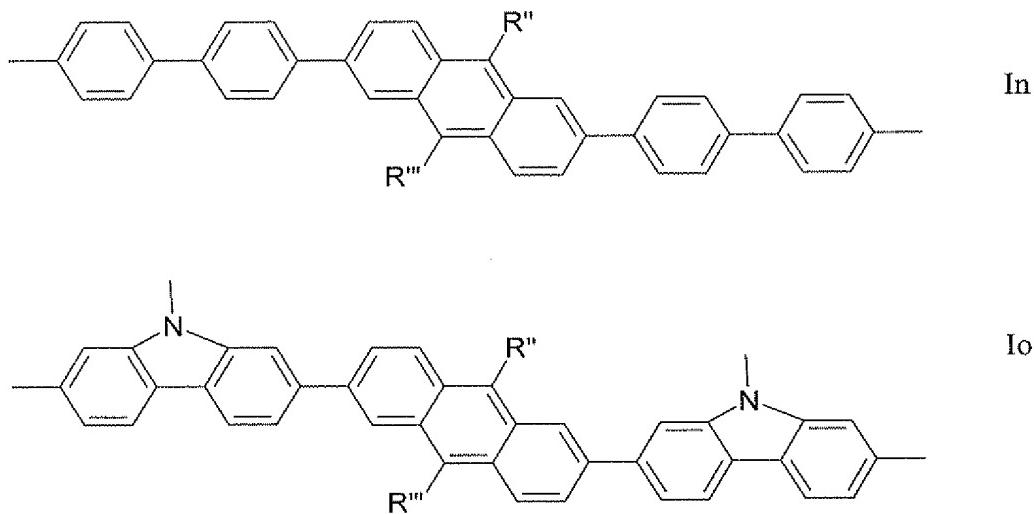
II



Ik



Im



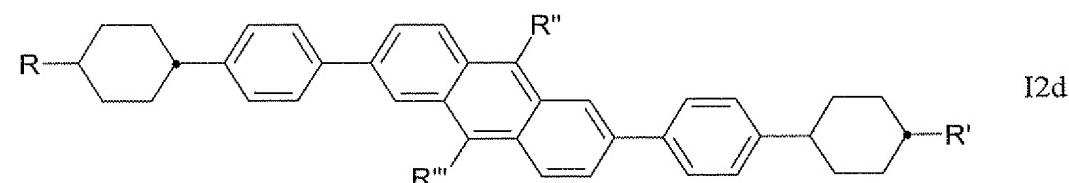
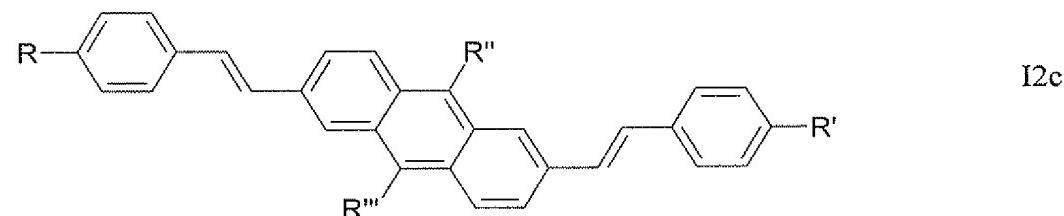
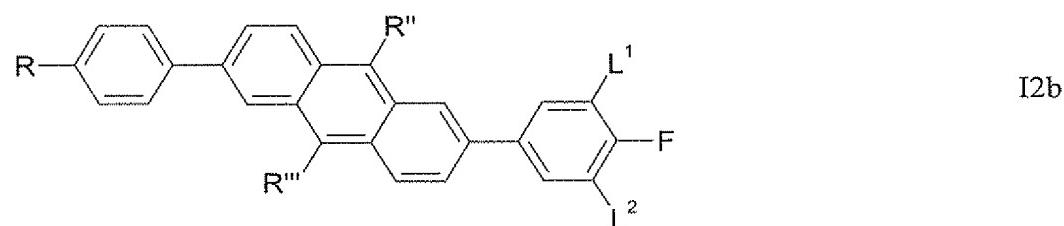
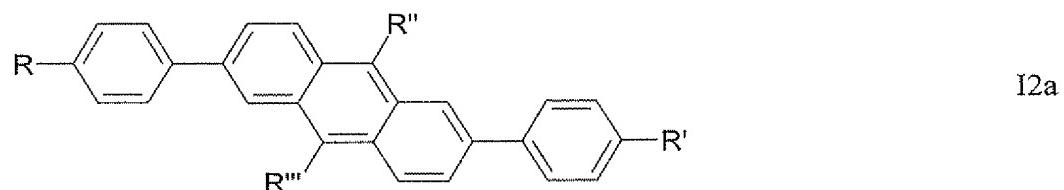
wherein

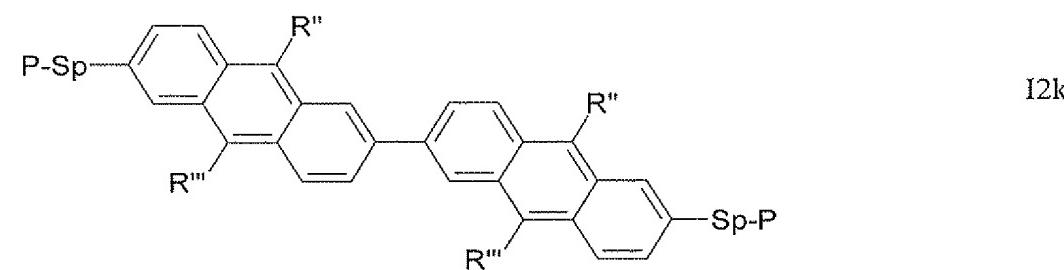
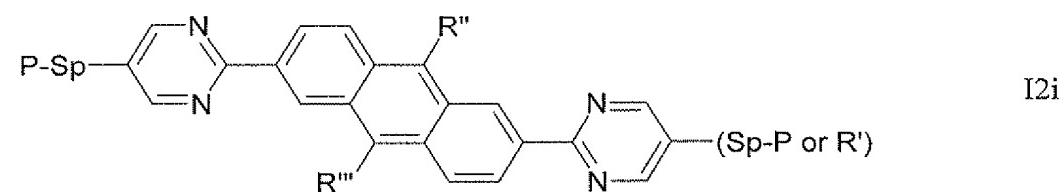
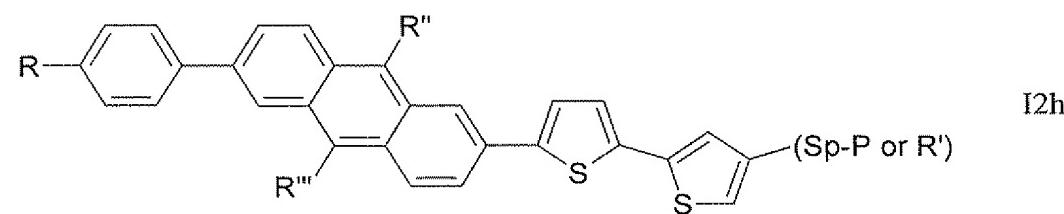
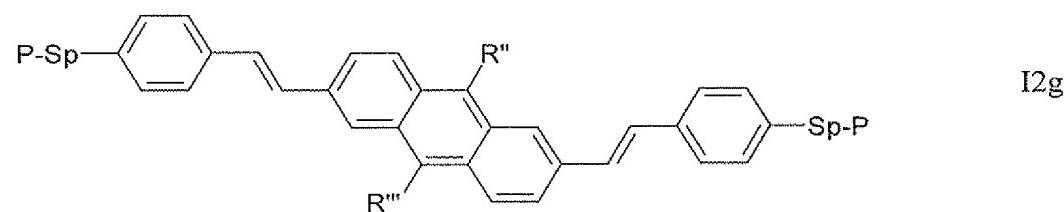
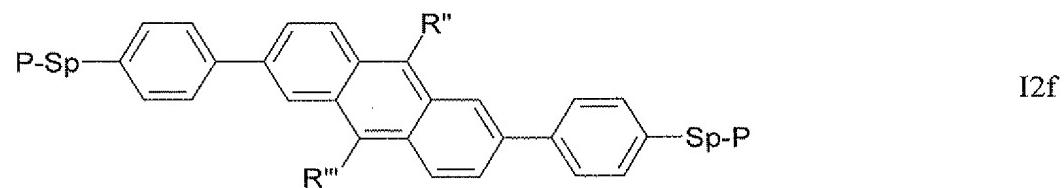
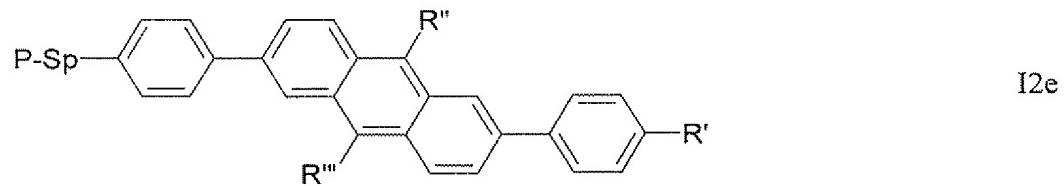
R and R' are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp, B(OR')(OR''), SnR⁰R⁰⁰R⁰⁰⁰ or SiR⁰R⁰⁰R⁰⁰⁰, have independently of each other one of the meanings of R⁺ in formula II,

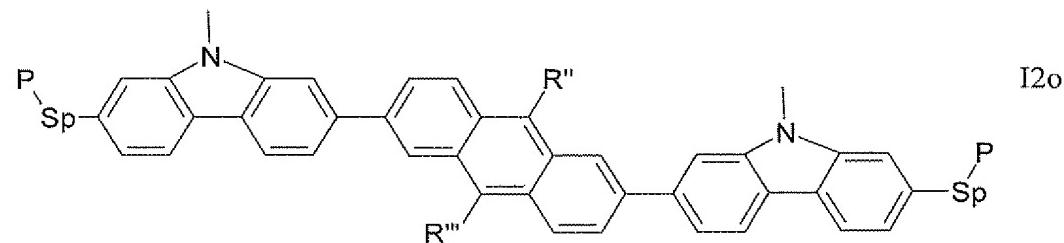
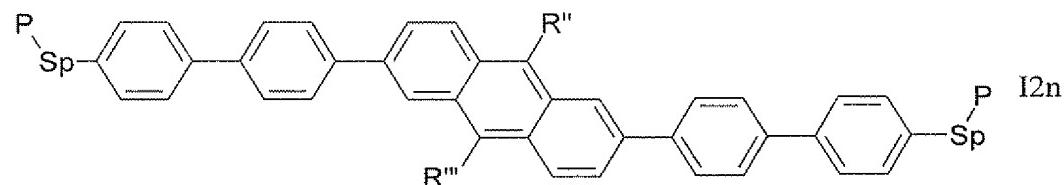
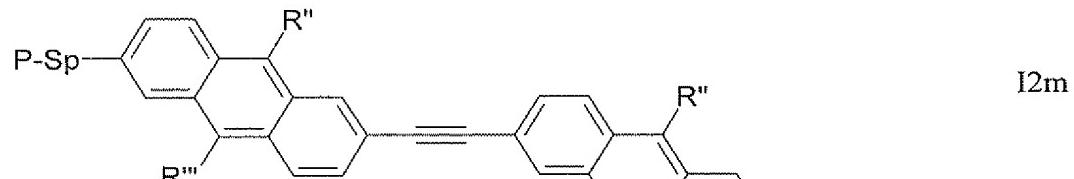
R'' and R''' are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp, have independently of each other one of the meanings of R⁵ in formula I,

and the aromatic rings are optionally substituted with 1, 2 or 3 F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or with P-Sp groups R³ as defined in formula I.

13. (Currently Amended) Compounds A compound according to claim 3, which is of one of the following formulae selected from the following formulae







wherein

P is a polymerizable or reactive group,

Sp is a spacer group or a single bond,

P and Sp have the meanings given in formula I, R, R', R'' and R''' have the meanings given in claim 12, and

R and R' are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms

are not linked directly to one another, or are P-Sp, B(OR')(OR''), SnR⁰R⁰⁰R⁰⁰⁰ or SiR⁰R⁰⁰R⁰⁰⁰,

R'' and R''' are, independently of each other, F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp, and

L¹ and L² are independently of each other H or F, and

the aromatic rings are optionally substituted with 1, 2 or 3 F, Cl, Br, I, CN, NO₂, NCS, SF₅ or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR⁰-, -SiR⁰R⁰⁰-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or with P-Sp groups R³ as defined in formula I.

14. (Currently Amended) An LC medium comprising at least one compound according to Claim 2 4.

15. (Currently Amended) A polymerizable Polymerisable LC material comprising at least one compound according to Claim 2 4 and optionally at least one further compound, wherein at least one of said compounds is polymerizable polymerisable.

16. (Currently Amended) A polymer which has been Polymer obtained by polymerizing polymerising a compound of formula I1 according to Claim 2 4 or a polymerizable polymerisable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable.

17. (Currently Amended) Anisotropic An anisotropic polymer which has been obtained by polymerizing polymerising a compound of formula I1 according to Claim 2 + or a polymerizable polymerisable LC material comprising a compound of formula I1 such a compound in its oriented state in form of a film.

18. (Currently Amended) Semiconductor A semiconductor or charge transport material comprising at least one compound of formula I1 according to Claim 2, polymerisable polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable according to Claim 4.

19. (Currently Amended) Light emissive A light-emissive material comprising at least one compound of formula I1 according to Claim 2, polymerisable polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable according to Claim 4.

20. (Currently Amended) An electrooptical display, LCD, eLCD, optical film, polarizer, compensator, beam splitter, reflective film, alignment layer, color filter, holographic element, hot stamping foil, colored image, decorative or security marking, consumer object, document of value, LC pigment, adhesive, synthetic resin with anisotropic mechanical properties, cosmetic product, pharmaceutical product, diagnostic product,

nonlinear optical element, optical information storage device, a chiral dopant, an electronic device, OFET, a component of an integrated circuit (IC), thin film transistor (TFT) in a flat panel display, Radio Frequency Identification (RFID) tag, a semiconducting or light-emitting component of organic light emitting diode (OLED), electroluminescent display or backlight of an LCD, photovoltaic or sensor device, an electrode material in a battery, a photoconductor, or electrophotographic recording or alignment layer in an LCD or OLED device, comprising at least one

compound of formula II according to Claim 2,

polymerizable LC material comprising at least one compound of formula II and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula II or a polymerizable LC material comprising at least one compound of formula II and optionally at least one further compound, wherein at least one of said compounds is polymerizable,

or a semiconductor or light-emitting material comprising at least one of said compound, polymerizable LC material or polymer Use of a compound, polymerisable LC material, polymer, semiconductor or light-emitting material according to Claim 1 in electrooptical displays, LCDs, eLCDs, optical films, polarisers, compensators, beam splitters, reflective films, alignment layers, colour filters, holographic elements, hot stamping foils, coloured images, decorative or security markings e.g. for consumer objects or documents of value, LC pigments, adhesives, synthetic resins with anisotropic mechanical properties, cosmetics, pharmaceuticals, diagnostics, nonlinear optics, optical information storage, as chiral dopants, in electronic devices like for example OFETs as components of integrated circuits (IC), as thin film transistors (TFT) in flat panel display applications or for Radio Frequency Identification (RFID) tags, in semiconducting or light-emitting components of organic light emitting diode (OLED) applications, electroluminescent displays or backlights of LCDs, for photovoltaic or sensor devices, as electrode materials in batteries, as photoconductors, or for electrophotographic applications or electrophotographic recording or as alignment layer in LCD or OLED devices.

21. (Currently Amended) An optical Optical, electrooptical or electronic device, LCD, eLCD, OLED, OFET, IC, TFT or alignment layer, comprising at least one compound of formula II according to Claim 2,

polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable,

or a semiconductor or light-emitting material comprising at least one of said compound, polymerizable LC material or polymer characterized in that it comprises a compound, polymerisable LC material, polymer, semiconductor or light-emitting material according to Claim 1.

22. (Currently Amended) A TFT or TFT array for a flat panel display displays, RFID tag, electroluminescent display or backlight, comprising at least one compound of formula I1 according to Claim 2,

polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable,

or a semiconductor or light-emitting material comprising at least one of said compound, polymerizable LC material or polymer comprising a compound, polymerisable LC material, polymer, semiconductor or light emitting material or device according to Claim 4.

23. (Currently Amended) Security A security marking or device, comprising at least one

compound of formula I1 according to Claim 2,

polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at

least one further compound, wherein at least one of said compounds is polymerizable,
or a semiconductor or light-emitting material comprising at least one of said
compound, polymerizable LC material or polymer comprising a compound, polymerisable
LC material, polymer, semiconductor or light emitting material or device according to Claim
4.

24. (New) A compound according to Claim 4, wherein A^{1-3} are, each independently, furane-2,5-diyl, thiophene-2,5-diyl, thienothiophene-2,5-diyl, dithienothiophene-2,6-diyl, pyrrol-2,5-diyl, 1,4-phenylene, azulene-2,6-diyl, pyridine-2,5-diyl, pyrimidine-2,5-diyl, naphthalene-2,6-diyl, 1,2,3,4-tetrahydro-naphthalene-2,6-diyl, indane-2,5-diyl, or 1,4-cyclohexylene, wherein one or two non-adjacent CH_2 groups are optionally replaced by O and/or S, wherein these groups are unsubstituted, mono- or polysubstituted by R^3 .